

Date: Wednesday, 03/06/2009 10:48:45 AM
 User: Julie Dawson

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SADDLE FITTING, FWD (OUTBOARD/INBOARD)	
Job Number :	48353	Part Number :	D2572	
Estimate Number :	10531	Drawing Number :	D2572 REV E	
P.O. Number :		Project Number :	N/A	
This Issue :	03/06/2009	S.O. No. :		
Prsht Rev. :	NC	Drawing Revision :	E	
First Issue :	1/1	Type :	MACHINED PARTS	
Previous Run :	47565	Material :		
Written By :		Due Date :	30/06/2009	Qty: 8 Um: Each
Checked & Approved By :	<u>J.D. 09.06.03</u>			
Comment :	Est: 1 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572KJ			

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	D6101005	Saddle Billet
-----	----------	---------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)
 7075-T7351 8.25X5.0X2.5
 Make from D6101-005 billet for D2572
 Ensure that grain is along 5.00" length
 Batch No: 46H11

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

Program Batch No. 48353 Double check by: DJP

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets
 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets
 4-Deburr and remove all machining marks
 5-Tumble to remove shap edges.

N.A 09/06/06

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
-----	---------------	------------------------------



Comment: CONVENTIONAL MILLING MACHINE

Machine keyway as per dwg D2571 & D2572

ml 09/06/11 (8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 03/06/2009 10:48:45 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, FWD (OUTBOARD/INBOARD)

Job Number: 48353

Part Number: D2572

Job Number:



Seq. #: Machine Or Operation: Description :

4.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



(Pb) 7

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

S.A 09/06/06

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

m 09/06/11

(8)

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

BL 09-06-11

(8)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M 111 472

START TIME:

2:00pm

OVEN TEMPERATURE:

320°F

FINISH TIME:

2:30pm

SH

09-06-15

(X8)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

BL 09-06-15

(8)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 433

9/6/15

(82)

SC

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/06/18

Job Completion



MF
09-06-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2572 PAR #: N/A Fault Category: Machining NCR: Yes No DQA: / Date: 09.07.07
 Resolution: accepted Disposition: Use as is QA: N/C Closed: / Date: 09.07.13

NCR: <u>48353</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>09/06/07</u>	<u>2.0</u>	<u>distance between 260 Holes</u> <u>is 3.883 at one place</u> <u>Only the top holes were affected.</u> <u>All other holes were in tolerance.</u> <u>R.C. Machine Dept function, for</u> <u>the difference.</u>	<u>[Signature]</u> <u>09.05.08</u> <u>per</u> <u>05/04/2</u>	<u>Acceptable.</u> <u>Bolts still fit.</u>	<u>H.A</u> <u>09/06/11</u>	<u>[Signature]</u> <u>09/06/11</u>	<u>[Signature]</u> <u>09.05.08</u> <u>per</u> <u>05/04/2</u>	<u>[Signature]</u> <u>09/06/11</u>
			<u>[Signature]</u> <u>05/04/2</u>	<u>FAI records the good dimensions.</u> <u>Employee thought it was okay to</u> <u>record the remaining correct</u> <u>dimensions, since this issue was</u> <u>recorded & approved on order.</u>		<u>[Signature]</u> <u>05/07/13</u>	<u>[Signature]</u> <u>05/07/13</u>	<u>[Signature]</u> <u>05/07/13</u>

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 48353
Description: Saddle, Fwd Inboard		Part Number: D2572
Inspection Dwg: D2572 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		0.440	0.440	0.440	0.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		7.999	7.999	7.999	7.999		
F	0.490	0.510		0.499	0.501	0.500	0.500		
G	0.257	0.262		0.260	0.260	0.260	0.260		
H	0.375	0.380		0.376	0.376	0.376	0.376		
I	0.490	0.510		0.502	0.5045	0.503	0.504		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.572	0.572	0.573	0.574		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.878	3.874	3.874	3.874		
P	0.115	0.135		0.124	0.125	0.124	0.125		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.249	0.250	0.249	0.250		
S	0.115	0.135		0.128	0.127	0.128	0.129		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.965	2.960	2.960	2.960		
V	0.230	0.250		0.238	0.237	0.237	0.237		
W	0.115	0.135		0.135	0.133	0.134	0.134		
X	0.307	0.312		0.312	0.312	0.310	0.312		
Y	0.760	0.765		0.760	0.760	0.760	0.760		
Z	0.352	0.372		0.362	0.363	0.362	0.362		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.625	0.625	0.625	0.625		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.247	0.245	0.247	0.245		
AE	1.375	1.395		1.387	1.388	1.387	1.387		
AF	0.115	0.135		0.135	0.135	0.135	0.135		
AG	0.240	0.280		0.250	0.250	0.250	0.250		
AH	0.240	0.260		0.247	0.247	0.246	0.247		
AI	2.000	2.020		2.003	2.004	2.003	2.005		
AJ	0.023	0.043							
Accept/Reject									

Measured by:	A.A	09/06/06
Date:		09/06/06

Audited by:	
Date:	09/06/11

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order: 48353	
Description: Saddle, Fwd Inboard		Part Number: D2572	
Inspection Dwg: D2572 Rev. E		Page 2 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

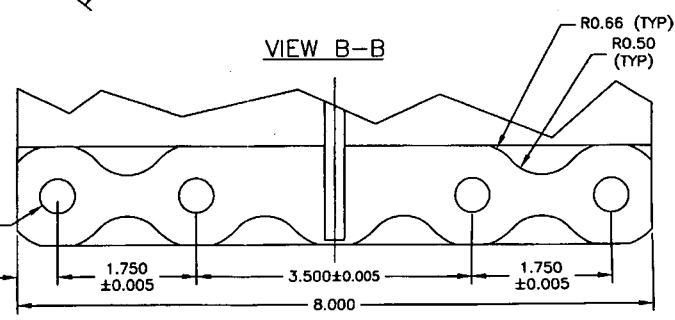
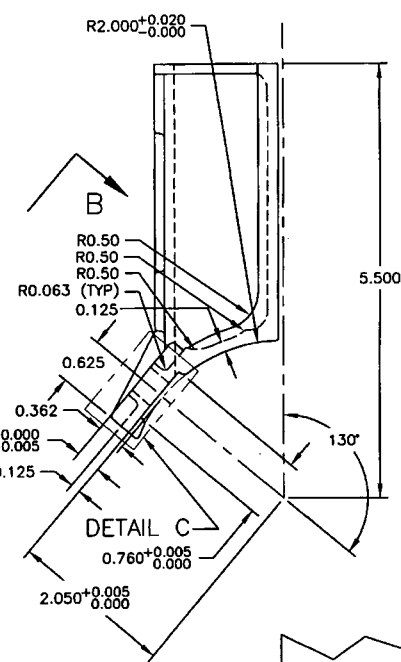
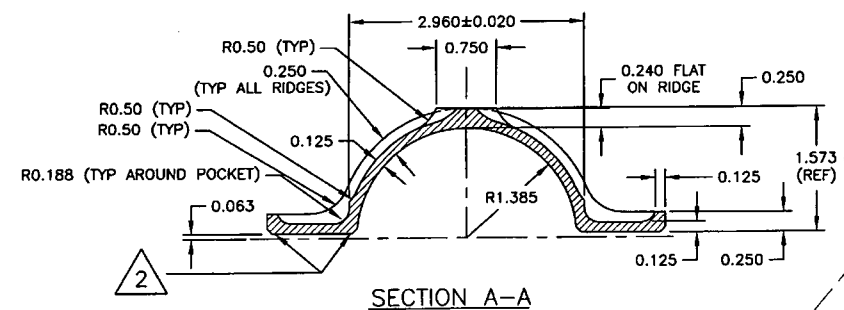
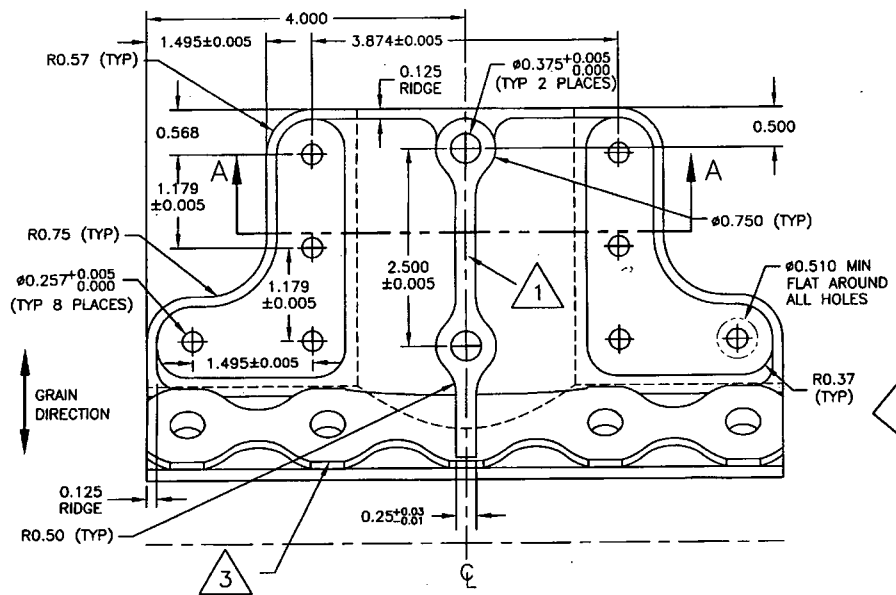
				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	16	17	18	By	Date
A	0.438	0.443		0.440	0.440	0.440	0.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		7.999	7.999	7.999	7.999		
F	0.490	0.510		0.498	0.500	0.500	0.500		
G	0.257	0.262		0.260	0.260	0.260	0.260		
H	0.375	0.380		0.376	0.376	0.376	0.376		
I	0.490	0.510		0.504	0.504	0.504	0.504		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.573	0.573	0.575	0.575		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		0.125	0.125	0.124	0.125		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.250	0.250	0.249	0.249		
S	0.115	0.135		0.128	0.129	0.128	0.129		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.961	2.960	2.960	2.960		
V	0.230	0.250		0.237	0.237	0.237	0.237		
W	0.115	0.135		0.135	0.134	0.135	0.135		
X	0.307	0.312		0.312	0.311	0.310	0.310		
Y	0.760	0.765		0.760	0.760	0.760	0.760		
Z	0.352	0.372		0.362	0.363	0.363	0.365		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.625	0.627	0.626	0.626		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.246	0.245	0.245	0.245		
AE	1.375	1.395		1.3877	1.3875	1.3874	1.3878		
AF	0.115	0.135		0.135	0.135	0.135	0.135		
AG	0.240	0.280		0.250	0.250	0.250	0.250		
AH	0.240	0.260		0.247	0.248	0.247	0.247		
AI	2.000	2.020		2.004	2.004	2.003	2.004		
AJ	0.023	0.043							
Accept/Reject									

Measured by: H.A	09/06/06	Audited by: [Signature]	
Date: 09/06/06		Date: 09/06/11	

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	[Signature]

RELEASED

05.12.06



NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-003)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 3 CHAMFER 0.063 x 45° ALL AROUND
- 4 CHAMFER 0.033 x 45° (SEE DETAIL C)

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DS	DRAWN BY PH
CHECKED		APPROVED
DATE	05.07.13	TITLE
		INNER FWD SADDLE

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART DART AEROSPACE LTD.
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2572
SHEET 1 OF 1
SCALE 2:3

DETAIL C
SCALE 2:1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER NO. 48353